26 Cultural Studies of Mobile Communication

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Despite the widespread take-up and use of mobile communications, their cultural dimensions have not received the sustained critical attention they merit. While much work is ahead in understanding mobiles from a social dimension, it is fair to say that the humanities and social sciences have now gone some far to rectifying their lack of attention to the social study of mobile telephony (something lamented by Ithiel de Sola Pool in 1977 about wireline telephony, a situation only slightly improved in the intervening thirty years). However, we lack equivalent studies devoted to the cultural dimensions of mobiles—whereas there are no lack of such cultural accounts for other information, communication, and media technologies.

One reason for this is that culture, even more so than society, was neglected when it came to the telephone (except studies such as Katz 1999, and Martin 1991). With the advent of the mobile, wireless, portable, and personal telephony has become inescapably and visibly part of the cultural realm, and so presses more insistently upon the researcher. This is why there is much interesting and pertinent material about the cultural significance of the mobile dispersed among the fast growing literature. There have been several collections with a broad sweep (Katz 2003; Ling 2004; Castells et al. 2006). There are a number of collections, for instance, that collocate both the social and cultural in their titles (for example, Glotz, Bertschi, and Locke 2005; Kim 2005). This is not surprising given the domain of culture is intimately connected to the constitution of the social sphere (du Gay et al. 1997). However, these links need to be analytically distinguished and traced before the two concepts can be systematically brought together.

In this chapter, I provide an overview of cultural studies of mobile communication and discuss the issues studies in the area have raised. I also suggest what is pressing in terms of new research on cultural aspects of mobiles. Before I proceed, a word about culture.

Culture is a notoriously elusive concept, and freighted with historical and political baggage. In my view, culture is the set of shared (though often contested and contradictory) ideas, symbols, practices, and artifacts that both allow people to make sense of everyday life but also position them in their society. We all enter into culture, in a

general sense, as infants and very young children, but then we also learn how to inhabit various other cultures. There are large cultures, associated with and shaped by social relations of nations, classes, races, genders, sexualities, impairment and disability, and other forms of embodiment and subjectivity. Subtended by, intersecting with, and crossing over are various "little" or "micro" cultures, such as those associated with subcultural formations, forms of media cultures, and technologies (for instance, du Gay et al.'s 1997 discussion of the Sony Walkman).

Divergent notions concerning culture, and the very real battles and stakes it calls up, can be observed in the reception of mobile phones and mobile communications. In many societies, mobiles have been both celebrated in a technologically determinist register, or even from the standpoint of the technological sublime, but have also been the subject of scorn, humor, or condescension because they represent the nadir of "Culture" today. The ubiquity, prevalence, and apparently constant resource to mobile communication is often counterposed against other apparently self-evident sources of cultural value and heritage—whether "high" literature, the virtues of "proper" conversation and letter writing, reasoned discussion of an ideal public sphere, or quality movies or photography.

Little Cultures of Mobile Phones

An important strand of the cultural studies of mobile phone literature is concerned with exploring, defining, and interpreting what characterizes the "little" cultures of this technology.

Early studies were preoccupied especially with inventorying and noting the new mobile communicative practices, and how they were creating new cultures of use, of portable and personal voice telephony (for example, the collaborative European research reported in Haddon 1998, and elsewhere; Plant 2002; Haddon and Vincent 2005), and of associated communication and information technologies, such as voice mail, phone books, caller identification, alerts (Jensen, Thrane, and Nilsen 2005)—some of which were being introduced on the new, fixed, intelligent telecommunications networks during the 1980s and 1990s. Especially important here were the cultural implications of the new constructions of place, and new forms of both individuation but also new relations to social collectivities and identities that mobile technologies entailed (Fortunati 2001b and 2002; Katz and Aakhus 2002). Later studies sought to compare mobiles with other contemporaneous media technologies such as the Internet (for example, Fortunati and Contarello 2002; Miyata, Wellman, and Boase 2005) or WiFi (Sawhney 2005).

With the passage of time, there has commenced some historical reconstruction and reconsideration of the development of these fledgling mobile cultures, and how they drew from, and were articulated with, the cultures of precursor technologies; not only

the telephone, but also various technologies of radio such as radiotelegraphy, citizens' band radio, pagers, transistor radios, and the Walkman, as well as conceptual inventions prefiguring new forms of mobile communication such as the Dick Tracy video wristwatch. Such cultural histories of mobiles need to be carefully delineated as they are often written from different standpoints (nascent history writing includes Arceneaux 2005; Agar 2003; contributions to Goggin and Thomas 2006 and Hamill and Lasen 2005).

There are a number of studies that look at how the mobile phone was ushered in and its cultures produced, through how such technology and its uses were imagined and narrated through various discourses, not least advertising, branding, symbols, images, language, metaphors, and rhetoric (for instance, contributions to Brown, Green, and Harper 2002; Wang 2005; Kavoori and Arceneaux 2006; cf. the social representations approach of Fortunati, Contarello, and Sarrica 2007 or the symbolic analyses of Campbell and Russo 2003 and Campbell, chapter 12 in this volume). Others have considered the role of media and cultural discourses more generally in the production of the mobile (Burgess 2004; Goggin 2006a; Yung 2005).

There has been a growing focus on the figure of the user as actively consuming, if not cocreating, and producing mobile technology. One of the attributes of the mobiles in its mass distribution phase coinciding with second-generation mobile technology was its potential for user customization through changing faces, downloading wallpaper, choosing ringtones, or adorning the handset. Such customization and the importance of the user in the sense-making and domestication of mobile telephone has not escaped scholars (Hjorth 2005; Hjorth and Kim 2005) or thoughtful industry practitioners.

Exploration of the intricate and often locally inflected cultural practices that have developed with different types of mobile communication technologies have emerged as an important facet of understanding design (a motif in Lindholm, Keinonen, and Kiljander 2003, for example). There is a burgeoning, fertile, and eclectic body of work and practice around mobile design, with ethnographic inquiry featuring in the attempt to scrutinize mobile culture to recursively improve design of new technologies (for instance, various chapters in Harper, Palen, and Taylor 2005; or Yue and Tng 2003).

One of the most striking and fully developed areas of cultural inquiry is text messaging, where there have been many fascinating studies. The most comprehensive account, and indeed one of the best cultural studies of mobiles we have, is Kasesniemi's 2003 *Mobile Messages*, which not only captures mobile messaging culture fully blown in its Finnish incubation, but is a highly illuminating account of second-generation GSM (the Global Standard for Mobile communications, developed in Europe) mobile culture.

Perhaps it is because text messaging developed seemingly out of nowhere, unenvisaged as a major feature of digital mobiles by those who devised text messaging—yet avidly used, with great significance, by users. The reasons for the "success" of text messaging, as compared to say the damp squib of Wireless Access Protocol (an early form of mobile Internet), has been discussed at length. Here various commentators have had recourse to theories that articulate the relationship between the social and the technological, such as in the traditions of social studies of science and technology (Fortunati 2005), but also theories in which culture itself is central, such as actor-network theory (e.g., Taylor and Vincent 2005). Text messaging has become something of a synecdoche for mobile culture itself. Texting is celebrated for its ability to form collectivities, or even shape national identities and polities, as in notably the coup d'text that putatively brought down the Philippines's President Estrada (Rafael 2003; cf. Pertierra et al. 2002), Howard Rheingold's smart mobs (2002), others' flash mobs, or even race riots (Goggin 2006b).

Mobile Phones In and Across Cultures

Another important if not preponderant strand of research is interested in how mobile phones have developed in different cultural formations. Most salient are the national studies of mobiles, which were crucial to laying a foundation for mobile research. Katz and Aakhus's pioneering collection not only invaluably curates a number of these studies but also encourages comparative consideration (to mention only a few: Fortunati 2002a; Mante 2002; Robbins and Turner 2002). An exemplary study of national mobile culture is Ito, Okabe, and Matsuda's detailed *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life* (2005). What the studies collected in this book do so well is to bring together various levels of discussion of mobile culture in a nuanced, historically and culturally contextualized treatment of the *keitai* (Japanese for the Internet-enabled mobile). As mobile cultures have taken firmer hold and have grown in complexity, there are now some important comparative, cross-national cultural studies of mobiles (Katz et al. 2003; Leonardi, Leonardi, and Hudson 2006; or various contributions to Kim 2005).

While many countries still await their detailed accounting in the literature on mobiles, the national as a category has certainly loomed large. What has been less well covered, if at all in some cases, are other social forms and their cultural correlates. There have been some studies of minority cultures, for instance, explorations of African American or Latino mobile use in the United States (respectively, Heckman 2006 and Leonardi 2003), but there is much scope for the recognition of multicultural mobility, or how mobiles are deeply implicated in contemporary cultural diversity and hybridity. Culture identities and practices of sexual minorities (and indeed majorities) were the subject of a fine, groundbreaking collection (Berry, Martin, and Yue 2003), but work since then has been difficult to find—despite the function of sex and intimacy in popular conceptions of, and many anecdotes devoted to, mobiles (see Elwood-Clayton 2005).

Similarly, there have been surprisingly few fine-grained, or theorized, studies about mobiles' role in connecting diasporic communities (something that has been discussed elsewhere in fine media studies of TV, video, and diasporas, as well as newer work that considers the Internet). There are a few studies on transnational cultures (for instance, Uy-Tioco 2007, which discusses the role of the mobile in globally distributed parenthood), but not as much as might be expected given the centrality to the modern world of foreign workers, international travel (in its widely varying forms), migration, refugee flight, and movements of capital and humans.

There are other studies into cultural aspects of mobiles scattered across the literature, though they indicate the importance of taking such ventures further. Youth culture has been compulsively studied (Caronia and Caron 2004; Ito, Okabe, and Matsuda 2005; Kasesniemi 2003; Kasesniemi and Rautiainen 2002; Lorente 2002), while the cultures of older people have been largely overlooked. While there has been little explicitly written on race and mobiles, for instance (even compared to the small literatures on this topic in, say, Internet studies, Rice and Katz 2003), we do have some important studies that take into account gender (Green 2002; Lacohée, Wakeford, and Pearson 2003; Hjorth and Kim 2005; Lee 2005; Shade 2007). Such studies underscore the importance of gender in the development of mobiles, but also the subtlety of how these processes unfold to shape the technology, to construct users and their uses in everyday life. There is also now the beginnings of critical discussion on disability (Goggin and Newell 2006; Power and Power 2004) that finds the mobile intimately involved in the constitution of disability as a cultural constitution—but also points to normative notions of disability and ability as influential in the shaping of mobiles as cultural technology. Cultural studies of mobiles and spirituality, faith, and religion is another important yet relatively neglected topic, and show the enduring centrality of faith communities, and their transformations, to how mobiles are imagined (though thought-provokingly canvassed in Campbell 2007; Elwood-Clayton 2003; Katz 2006).

Mobile Media Cultures

As mobile phones have not only infiltrated themselves into communication, but also media, entertainment, and information, so we already have important cultural soundings of these developments. In the wake of the excitement surrounding text messaging, there have been important studies of multimedia messaging (MMS) (such as Ling and Julsrud 2005; Oksman 2005; Scifo 2005). Also concerned with visual cultures of mobiles have been a growing stock of studies of camera phones and mobile photography (see contributions to Ito, Okabe, and Matsuda 2005; Lee 2005; Rivière 2005). Another area of considerable interest has been the articulation of mobiles, Internet, and online technologies and cultures with new forms of digital photo and image representation, sharing, and exchange—for instance, exploration of mobile blogging, or moblogs (Döring and Gundolf 2005). Sound, music, and auditory cultures have also been explored (for example, Bull 2005), though only to a minor extent so far. Less well represented are cultural studies of mobile film and video, and also the new developments in mobile television (on the latter, see Goggin 2006a). Third-generation mobiles have often been discussed, but more often than not through the rose-colored lens of utopian discourses—critical work is badly needed here. There is much work and theorizing in artistic circles on locative media and mobile art, but still too little in the academic literature (De Souza e Silva 2006).

Cultural Futures for Mobiles: A Research Agenda

In this brief chapter, I hope to have given the interested reader a snapshot of the state of cultural studies of mobiles. Clearly, my treatment here can only be indicative and selective, rather than comprehensive. It is also provisional and partial, not least given that it is largely based on the Anglophone literatures. This said, I shall finish by briskly proposing a research agenda in this area.

Firstly, there is much work to do in documenting and theorizing the distinctive features of mobile phone culture, and the various particularities and features of the "little" cultures it comprises. The best exemplar for this work so far is perhaps the intense interest and debate centered on text messaging. We have uneven bodies of work on other aspects of mobile phone culture, such as camera phones, customization, and ringtones, but here further research, synthesis, and theoretical inquiry is required.

With mobile phone culture becoming mobile *media* cultures (Nilsson, Nuldén, and Olsson 2001), there will now be even larger domain requiring investigation—and also a pressing need to engage with concepts of and research traditions pertaining to media. With the novelty of, and hype ushering in, developments such as mobile television, mobile video, or mobile gaming, we need not only historically and culturally situate mobiles in relation to their borrowings from and relations with TV, radio, or print, but also newer media. Here then, mobile studies can profitably engage with the fields of film, TV, journalism, games, and Internet studies. Given the blurring of mobiles, wireless technologies, and pervasive computing, it will be fruitful to continue and intensify the cross-fertilization of conversations across these literatures and undertakings.

Secondly, there is a need to broaden and intensify the cross-cultural work on mobiles—to understand the social and cultural construction, appropriation, and domestication of mobiles, and how our use of these devices have modified our notions of communication. While there are important studies available we still require 1) further, extended, systematic and comprehensive studies of the insertion and shaping of mobiles in national cultural contexts (as counterparts to the work available on Finland, Japan, and the Philippines); 2) work that grapples and gauges the implication of mobiles in the dynamics of cultural diversity and hybridity, especially in multicultural societies—focusing, for instance, on cultural minority, migrant, and refugee populations; on the cultures of class and race; and on cultures associated with various forms of identity (such as sexuality, gender, race, and disability).

Thirdly, once the peculiar features of mobile culture is grasped, and how mobiles have been taken up and made sense of in various society is understood, then mobiles can be placed in the larger arc and field of culture. How do the cultures of mobile technologies relate to culture more generally? Here there is a need for the work on mobiles to join other innovative cultural research in discerning the role of mobile communication in contemporary social and cultural transformation, whether social conflict (riots) or dissent (protests), or social production and reproduction (work, households). An important venture here is exploring mobiles as part of popular culture, and through this also, mobiles' implication in the changing nature of the relationships among, indeed the viability of sustaining distinctions across, high or elite culture, middlebrow culture, and "low" working-class or marginalized cultures. Imperative here is attention to the implication of mobiles in contests of values, and, in a general sense, in the moral clashes over ordained and accepted public uses.

Another underdeveloped problematic is mobiles and cultural citizenship (Lillie 2005), as might be thought through the notion of "mobile commons." Also important is understanding the part of mobiles in large-scale and small-scale communicative architectures that underpin cultures and national or global or local conversations that used to be associated with newspapers (with the rise of nationalism), or TV and radio (especially in the twentieth century), or the Internet at the beginning of the twenty-first century.

Finally, there has been only a limited range of voices, themes, and cultural locations represented in mobile communication study thus far. Unsurprisingly, mobile scholarship and commentary, as well as the diffusion of mobile devices themselves, have been concentrated in wealthy countries. At least there has been a modicum of attention accorded to mobile communication in many countries in Europe, North America, Asia, as well as a number of other countries, which for various reasons have been the source of fascination for their mobile uses (such as Japan, Korea, or the Philippines, and China being the latest case in point here). However, there are many other countries, especially in the developing world, where mobiles are important cultural technologies despite issues of income, cost, and affordability (Donner 2005), yet these are invisible, or perhaps illegible, even in the vibrant, interdisciplinary, and cosmopolitan world of the mobiles scholarly community.

Of course, it is not simply a question of mobiles researchers from the betterresourced countries in the West and East studying, writing, and discussing mobile cultures of other societies and places, though, if the fraught power and other relations here are recognized, such work could assume great importance. There are difficult politics of knowledge at stake, and imposing issues of voice and representation. There are questions, too, of acknowledging the cultural specificity of our theories, histories, concepts, and methods, as has been articulated in the new wave of research on Asian mobiles and modernities (see, for instance, Bell 2005; Law, Fortunati, and Yang 2006; Lin 2005; McLelland 2007; Pertierra and Koskinen 2007). When we reflect upon the condition and politics of culture played out and debated elsewhere, this seriously stands to problematize cultural studies of mobile communications—but also to greatly recast them and spur them on.

References

Agar, J. 2003. Constant Touch: A Global History of the Mobile Phone. Cambridge: Icon Books.

Arceneaux, N. 2005. The world is a phone booth: The American response to mobile phones, 1981–2000. *Convergence* 11(2): 23–31.

Bell, G. 2005. The age of the thumb: A cultural reading of mobile technologies from Asia. In *Thumb Culture: The Meaning of Mobile Phones for Society*, edited by P. Glotz, S. Bertschi, and C. Locke. Bielefeld: Transcript Verlag.

Berry, C., F. Martin, and A. Yue, eds. 2003. *Mobile Cultures: New Media in Queer Asia*. Durham, N.C.: Duke University Press.

Brown, B., N. Green, and R. Harper, eds. 2002. Wireless World: Social, Cultural and Interactional Issues in Mobile Communications and Computing. London: Springer-Verlag.

Bull, M. 2005. The intimate sounds of urban experience: An auditory epistemology of everyday mobility. In *A Sense of Place: The Global and the Local in Mobile Communication,* edited by K. Nyíri. Vienna: Passagen Verlag.

Burgess, A. 2004. *Cellular Phones, Public Fears, and a Culture of Precaution*. New York: Cambridge University Press.

Campbell, H. 2007. What hath god wrought: Mobile faith and the culturing of the cell phone. In *Mobile Phone Cultures*, edited by G. Goggin. London: Routledge.

Campbell, S. W., and T. C. Russo. 2003. The social construction of mobile telephony: An application of the social influence model to perceptions and uses of mobile phones within personal communication networks. *Communication Monographs* 70(4): 317–334.

Caronia, L., and A. H. Caron. 2004. Constructing a specific culture: Young people's use of the mobile phone as a social performance. *Convergence* 10(2): 28–61.

Castells, M., M. Fernandez-Ardevol, J. L. Qiu, and A. Sey. 2006. *Mobile Communication and Society: A Global Perspective*. Cambridge, Mass.: The MIT Press.

Contarello, A., L. Fortunati, and M. Sarrica. 2007. Social thinking and the mobile phone: A study of social change with the diffusion of mobile phones, using a social representations framework. In *Mobile Phone Cultures*, edited by G. Goggin. London: Routledge.

De Sola Pool, I., ed. 1977. The Social Impact of the Telephone. Cambridge, Mass.: The MIT Press.

De Souza e Silva, A. 2006. Interfaces of hybrid spaces. In *The Cell Phone Reader: Essays in Social Transformation*, edited by A. Kavoori and N. Arceneaux. New York: Peter Lang.

Dong, S., ed. 2005. *When Mobile Came: The Cultural and Social Implications of Mobile Communication*. Seoul: Communication Books.

Donner, J. 2005. Research approaches to mobile use in the developing world: a review of the literature. *Proceedings of International Conference on Mobile Communication and Asian Modernities*, edited by A. Lin. City University of Hong Kong, Kowloon.

Döring, N., and A. Gundolf. 2005. Your life in snapshots: Mobile weblogs (moblogs). In *Thumb Culture: The Meaning of Mobile Phones for Society*, edited by P. Glotz, S. Bertschi, and C. Locke. Bielefeld: Transcript Verlag.

du Gay, P., S. Hall, L. Janes, H. Mackay, and K. Negus. 1997. *Doing Cultural Studies: The Story of the Sony Walkman*. Milton Keynes: Open University; Thousand Oaks, Calif.: Sage.

Elwood-Clayton, B. 2003. Texting and God: the Lord is my textmate—folk Catholicism in the cyber Philippines. In *Mobile Democracy: Essays on Society, Self and Politics*, edited by K. Nyíri. Vienna: Passagen Verlag.

Elwood-Clayton, B. 2005. Desire and loathing in the cyber Philippines. In *The Inside Text: Social, Cultural and Design Perspectives on SMS*, edited by R. Harper, L. Palen, and A. Taylor. Dordrecht: Springer.

Fortunati, L., and A. Contarello. 2002. Internet-Mobile convergence: Via similarity or complementarity? *Trends in Communication* 9: 81–98.

Fortunati, F., M. Sarrica, and A. Contarello. 2007. Social thinking and the mobile phone: A study of social change with the diffusion of mobile phones, using a social representations framework. *Continuum: Journal of Media and Cultural Studies* 21: 149–163.

Fortunati, L., J. E. Katz, and R. Riccini, eds. 2003. *Mediating the Human Body: Technology, Communication, and Fashion*. Mahwah, N.J.: Lawrence Erlbaum.

Fortunati, L. 2001. The mobile phone: An identity on the move. *Personal and Ubiquitous Computing* 5: 85–98.

Fortunati, L. 2002a. Italy: Stereotypes, true and false. In *Perpetual Contact: Mobile Communication, Private Talk, Public Performance,* edited by J. E. Katz and M. Aakhus. Cambridge: Cambridge University Press.

Fortunati, L. 2002b. The mobile phone: Towards new categories and social relations. *Information, Communication & Society* 5: 513–528.

Fortunati, L. 2005. The mobile phone as technological artefact. In *Thumb Culture: The Meaning of Mobile Phones for Society*, edited by P. Glotz, S. Bertschi, and C. Locke. Bielefeld: Transcript Verlag.

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Glotz, P., S. Bertschi, and C. Locke, eds. 2005. *Thumb Culture: The Meaning of Mobile Phones for Society*. Bielefeld: Transcript Verlag.

Goggin, G. 2006a. Cell Phone Culture: Mobile Technology in Everyday Life. London: Routledge.

Goggin, G. 2006b. SMS riot: Transmitting race on a Sydney Beach, December 2005. *M/C Journal* 9(1). http://journal.media-culture.org.au/0603/02-goggin.php.

Goggin, G., ed. 2007. Mobile Phone Cultures. London: Routledge.

Goggin, G., and J. Thomas, eds. 2006. Mobile histories. Special issue of *Southern Review: Communication, Politics & Culture* 38(3).

Goggin, G., and C. Newell. 2006. Disabling cell phones. In *The Cell Phone Reader: Essays in Social Transformation*, edited by A. Kavoori and N. Arceneaux. New York: Peter Lang.

Gottlieb, N., and M. McLelland, eds. 2003. Japanese Cybercultures. London: Routledge.

Green, N. 2002. Who's watching whom? Surveillance, regulation and accountability in mobile relations. In *Wireless World: Social, Cultural and Interactional Issues in Mobile Communications and Computing*, edited by B. Brown, N. Green, and R. Harper. London: Springer-Verlag.

Haddon, L., ed. 1998. *Communications on the Move: The Experience of Mobile Telephony in the 1990s*. Stockholm: Telia.

Haddon, L., and J. Vincent. 2005. Making the most of the communications repertoire: Choosing between the mobile and fixed-line. In *A Sense of Place: The Global and the Local in Mobile Communication*, edited by K. Nyíri. Vienna: Passagen Verlag.

Haddon, L. 2003. Domestication and mobile telephony. In *Machines that Become Us: The Social Context of Personal Communication Technology*, edited by J. E. Katz. New Brunswick, N.J.: Transaction Publishers.

Haddon, L. 2004. Information and Communication Technologies in Everyday Life: A Concise Introduction and Research Guide. Oxford and New York: Berg.

Hamill, L., and A. Lasen, eds. 2005. Mobile World: Past, Present and Future. London: Springer.

Harper, R., L. Palen, and A. Taylor, eds. 2005. *The Inside Text: Social, Cultural and Design Perspectives on SMS*. Dordrecht: Springer.

Heckman, D. 2006. "Do you know the importance of a skypager?": Telecommunications, African Americans, and popular culture. In *The Cell Phone Reader: Essays in Social Transformation*, edited by A. Kavoori and N. Arceneaux. New York: Peter Lang.

Hjorth, L., and H. Kim. 2005. Being there and being here: Gendered customising of mobile 3G practices through a case study in Seoul. *Convergence* 11: 49–55.

Hjorth, L. 2005. Odours of mobility: Japanese cute customization in the Asia-Pacific region. *Journal of Intercultural Studies* 26: 39–55.

Ito, M., D. Okabe, and M. Matsuda, eds. 2005. *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Cambridge, Mass. and London, England: The MIT Press.

Ito, M. 2005. Introduction: Personal, portable, pedestrian. In *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*, edited by M. Ito, D. Okabe, and M. Matsuda. Cambridge, Mass.: The MIT Press.

Jensen, M., K. Thrane, and S. J. Nilsen. 2005. The integration of mobile alerts into everyday life. In *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. E. Pederson. London: Springer.

Kasesniemi, E. L., and P. Rautiainen. 2002. Mobile culture of children and teenagers in Finland. In *Perpetual Contact: Mobile Communication, Private Talk, Public Performance,* edited by J. E. Katz and M. Aakhus. Cambridge: Cambridge University Press.

Kasesniemi, E. L. 2003. *Mobile Messages: Young People and a New Communication Culture*. Tampere: Tampere University Press.

Katz, J. E. 1999. *Connections: Social and Cultural Studies of American Life*. New Brunswick, N.J.: Transaction.

Katz, J. E. 2006. *Magic in the Air: Mobile Communication and the Transformation of Social Life*. New Brunswick, N.J.: Transaction Publishers.

Katz, J. E., ed. 2003. *Machines that Become Us: The Social Context of Personal Communication Technology*. New Brunswick, N.J.: Transaction Publishers.

Katz, J. E., and M. Aakhus. 2002. Conclusion: Making meaning of mobiles: A theory of Apparatgeist. In *Perpetual Contact: Mobile Communication, Private Talk, Public Performance*, edited by J. E. Katz and M. Aakhus. Cambridge: Cambridge University Press.

Katz, J. E., M. Aakhus, H. D. Kim, and M. Turner. 2003. Cross-cultural comparisons of ICTs. In *Mediating the Human Body: Technology, Communication, and Fashion,* edited by L. Fortunati, J. E. Katz, and R. Riccini. Mahwah, N.J.: Lawrence Erlbaum.

Kavoori, A., and N. Arceneaux, eds. 2006. *The Cell Phone Reader: Essays in Social Transformation*. New York: Peter Lang.

Kim, S. D., ed. 2005. *When Mobile Came: The Cultural and Social Impact of Mobile Communication*. Seoul: Communication Books.

Lacohée, H., N. Wakeford, and I. Pearson. 2003. A social history of the mobile telephone with a view of its future. *BT Technology Journal* 21: 203–211.

Law, P. L., L. Fortunati, and S. Yang, eds. 2006. New Technologies in Global Societies. Singapore: World Scientific.

Lee, D. H. 2005. Women's creation of camera phone culture. *Fibreculture Journal* 6. http://journal .fibreculture.org/issue6/issue6_donghoo.html.

Leonardi, P. M. 2003. Problematizing "new media": Culturally based perceptions of cell phones, computers and the Internet among United States' Latinos. *Critical Studies in Media Communication* 20: 160–179.

Leonardi, P. M., M. E. Leonardi, and E. Hudson. 2006. Culture, organization, and contradiction in the social construction of technology: Adoption and use of the cell phone across three cultures. In *The Cell Phone Reader: Essays in Social Transformation*, edited by A. Kavoori and N. Arceneaux. New York: Peter Lang.

Lillie, J. 2005. Cultural access, participation, and citizenship in the emerging consumer-network society. *Convergence* 11(2): 41–48.

Lin, A., ed. 2005. Proceedings of the International Conference on Mobile Communication and Asian Modernities. Hong Kong, June 7–8.

Lindholm, C., T. Keinonen, and H. Kiljander, eds. 2003. *Mobile Usability: How Nokia Changed the Face of the Mobile Phone*. New York: McGraw-Hill.

Ling, R., and P. E. Pederson, eds. 2005. *Mobile Communications: Re-negotiation of the Social Sphere*. London: Springer.

Ling, R., and T. E. Julsrud. 2005. The development of grounded genres in Multimedia Messaging Systems (MMS) among mobile professionals. In *A Sense of Place: The Global and the Local in Mobile Communication*, edited by K. Nyíri. Vienna: Passagen Verlag.

Ling, R. 2004. *The Mobile Connection: The Cell Phone's Impact on Society*. San Francisco, Calif.: Morgan Kaufmann.

Lorente, S., ed. 2002. Juventud y teléfonos móviles. Special issue of *Revista de Estudios de Juventud* 57.

Mante, E. 2002. The Netherlands and the US compared. In *Perpetual Contact: Mobile Communication, Private Talk, Public Performance,* edited by J. E. Katz and M. Aakhus. Cambridge: Cambridge University Press.

Martin, M. 1991. *Hello Central?: Gender, Culture, and Technology in the Formation of Telephone Systems*. Montreal: McGill-Queen's University Press.

McLelland, M. 2007. Socio-cultural aspects of mobile communication technologies in "Asia": Examples from the recent literature. In *Mobile Phone Cultures*, edited by G. Goggin. London: Routledge.

Miyata, K., B. Wellman, and J. Boase. 2005. The wired—and wireless—Japanese: webphones, PCs and social networks. In *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. E. Pederson. London: Springer.

Morley, D. 2003. What's "home" got to do with it? European Journal of Cultural Studies 6: 435-458.

Nilsson, A., U. Nuldén, and D. Olsson. 2001. Mobile media: The convergence of media and mobile communications. *Convergence* 7: 34–38.

Okada, T. 2005. Youth culture and the shaping of Japanese mobile media: personalization and the *keitai* Internet as multimedia. In *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*, edited by M. Ito, D. Okabe, and M. Matsuda. Cambridge, Mass.: The MIT Press.

Oksman, V. 2005. MMS and its "early adopters" in Finland. In *A Sense of Place: The Global and the Local in Mobile Communication*, edited by K. Nyíri. Vienna: Passagen Verlag.

Pertierra, R., and I. Koskinen, eds. 2007. *The Social Construction and Usage of Communication Technologies: European and Asian Experiences*. Singapore: Singapore University Press.

Pertierra, R., E. F. Ugarte, A. Pingol, J. Hernandez, and N. L. Dacanay. 2002. *Txt-ing selves: Cell-phones and Philippine Modernity*. Manila: De La Salle University Press. http://www.finlandembassy .ph/texting1.htm.

Plant, S. 2002. On the Mobile: The Effects of Mobile Telephones on Social and Individual Life. www.motorola.com/mot/doc/0/234_MotDoc.pdf.

Power, M., and D. Power. 2004. Everyone here speaks TXT: Deaf people using SMS in Australia and the rest of the world. *Journal of Deaf Studies and Deaf Education* 9: 333–343.

Rafael, V. L. 2003. The cell phone and the crowd: Messianic politics in the contemporary Philippines. *Public Culture* 15: 399–425.

Rheingold, H. 2002. Smart Mobs: The Next Social Revolution. Cambridge, Mass.: Perseus.

Rice, R. E., and J. E. Katz. 2003. Comparing Internet and mobile phone usage: Digital divides of usage, adoption, and dropouts. *Telecommunications Policy* 27: 597–623.

Rivière, C. 2005. Mobile camera phones: A new form of "being together" in daily interpersonal communication. In *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. E. Pederson. London: Springer.

Robbins, K. A., and M. Turner. 2002. United States: Popular, pragmatic and problematic. In *Perpetual Contact: Mobile Communication, Private Talk, Public Performance*, edited by J. E. Katz and M. Aakhus. Cambridge: Cambridge University Press.

Sawhney, H. 2005. Wi-Fi networks and the reorganisation of wireline-wireless relationship. In *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. E. Pederson. London: Springer.

Scifo, B. 2005. The domestication of the camera phone and MMS communications: The experience of young Italians. In *A Sense of Place: The Global and the Local in Mobile Communication*, edited by K. Nyíri. Vienna: Passagen Verlag.

Shade, L. R. 2007. Mobile designs as gendered scripts. In *Mobile Phone Cultures*, edited by G. Goggin. London: Routledge.

Taylor, A. S., and J. Vincent. 2005. A SMS history. In *Mobile World: Past, Present and Future,* edited by L. Hamill and A. Lasen. London: Springer.

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Uy-Tioco, C. 2007. Mobile phones and text messaging: Reinventing migrant mothering and transnational families. In *Mobile Phone Cultures*, edited by G. Goggin. London: Routledge.

Wang, J. 2005. Youth culture, music, and cell phone branding in China, *Global Media and Communication* 185–201.

Yu, L., and T. H. Tng. 2003. Culture and design for mobile phones for China. In *Machines that Become Us: The Social Context of Personal Communication Technology*, edited by J. E. Katz. New Brunswick, N.J.: Transaction Publishers.

Yung, V. 2005. The construction of symbolic values of the mobile phone in the Hong Kong Chinese print media. In *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. E. Pederson. London: Springer.